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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,946	11/30/2001	Taeko Hayase	0445-0313P	3991

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EXAMINER

COLE, ELIZABETH M

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 06/19/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

MF=11

Office Action Summary

Application No.

09/996,946

Applicant(s)

HAYASE ET AL.

Examiner

Elizabeth M Cole

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>7 and 10</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1771

1. Applicant's election with traverse of Group I, claims 1-11 in Paper No. 9 is acknowledged. The traversal is on the ground(s) that it would not be burdensome. This is not found persuasive because the search for a fibrous sheet would not encompass cleaning methods and therefore the examination of both groups would constitute a burden.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. In claim 1, it is not clear what is meant by "a large number of tips". The term "large" in claim 1 is a relative term which renders the claim indefinite. The term "large" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is not clear from the specification or claims how many fiber tips would need to be present to be a large number. Also, in claim 1, in the phrase "has a large number of tips of said thermoplastic fibers exposed on the surface of said cleaning sheet to have capability of scouring or scraping dirt off present on a soiled surface" it appears that the word "present on" should be deleted.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Art Unit: 1771

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Kobayashi et al, EP 0,926,288 A1.

Kobayashi et al discloses a sheet material comprising cellulosic fibers and thermoplastic fibers which are present in the claimed proportions. See abstract. The thermoplastic fibers may have the claimed length and diameters. The sheet material may be embossed. The cellulosic fibers and thermoplastic fibers are hydroentangled. Since the fibers are not bonded using bonding agents, presumably the tips of the fibers at the surface of the fabric would be exposed and would have the capability of scouring or scraping dirt off of a surface.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3-8, are rejected under 35 U.S.C. 103(a) as being unpatentable over Floden,

U.S. Patent No. 3,837,995 in view of Kobayashi et al, EP 0.926,268. Floden discloses a fabric comprising a first layer of thermoplastic microfibers and a second layer of cellulosic fibers. The two layers are integrated without the use of bonding agents and therefore, presumably the tips of the thermoplastic fibers would be exposed and would have the capability of cleaning a surface.

The basis weights of the layers is within the claimed range. See examples 7 to 10. Floden differs from the claimed invention because Floden does not disclose the claimed fibers length for the

Art Unit: 1771

thermoplastic microfibers. Kobayashi et al discloses that thermoplastic microfibers having the claimed length are suitable for use as the thermoplastic fiber component in wiping sheets which comprise both thermoplastic and cellulosic fibers. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed thermoplastic fibers having the dimensions taught by Kobayashi et al. One of ordinary skill in the art at the time the invention was made would have been motivated to employ thermoplastic fibers taught by Kobayashi et al in the sheet disclosed by Floden because Kobayashi et al teaches that such fibers are suitable for use in wiping sheets.

8. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Floden, U.S. Patent No. 3,837,995 in view of Kobayashi et al, EP 0.926,268 as applied to claims 1, 3-8 above, and further in view of JP 2000212866. Neither Floden nor Kobayashi et al discloses the use of conjugate fibers or the use of crimped fibers as the thermoplastic fibers. JP 200212866 teaches that it is known to employ a crimped conjugate fiber as the thermoplastic fiber in a sheet comprising cellulosic fibers and thermoplastic fibers. JP 200212866 teaches that such crimped conjugate fibers enhance the bonding of the cellulosic fibers within the sheet. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed a crimped, conjugate fiber as the thermoplastic fiber in Floden. One of ordinary skill in the art would have been motivated to have used a crimped, conjugate fiber as the thermoplastic fiber in Floden in order to enhance the bonding of the cellulosic fibers within the sheet.

Art Unit: 1771

9. Claims 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Floden, U.S. Patent No. 3,837,995 in view of Kobayashi et al, EP 0.926,268 as applied to claims 1, 3-8 above, and further in view of WO 01/52713 to Kakiuchi et al. Neither Floden nor Kobayashi et al teaches impregnating the sheet with an aqueous detergent comprising an electrolyte. Kakiuchi et al teaches that cleaning sheets such as nonwoven fabrics and papers can be impregnated with an aqueous detergent in order to enhance the cleaning ability of the sheet. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have impregnated the sheet of Floden with an aqueous detergent, as taught by Kakiuchi et al, motivated by the expectation that this would enhance the cleaning ability of the sheet.


10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Amundson et al, U.S. Patent No. 6,028,018; Moody, III, U.S. Patent No. 6,381,817.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (703) 308-0037. The examiner may be reached between 6:30 AM and 5:00 PM Monday through Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (703) 308-2414.

Inquiries of a general nature may be directed to the Group Receptionist whose telephone number is (703) 308-0661.

The fax number for official faxes is (703) 872-9310. The fax number for official after final faxes is (703) 872-9311. The fax number for unofficial faxes is (703) 305-5436.


Elizabeth M. Cole
Primary Examiner
Art Unit 1771

e.m.c
June 11, 2002